

**ABSTRACT**

A solution is provided for the problem of determining a successful bidder in an auction wherein bids are submitted for a great number of trading targets (products). Two restrictions are imposed on the combinations of products that are permitted: 1. Bids may be submitted for only one product type; and 2. The relationship existing among available combinations of products for which bids may be submitted must be based on a hierarchical structure. From a set of bids submitted under the above restrictions, a subset of optimum bids are selected by using dynamic programming.